

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. When striketrough cannot easily be perceived, or when five or fewer characters are deleted, [[double brackets]] are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Currently Amended) A bottom removal-type paper supply apparatus, comprising:
having
a paper support base on which paper is stacked located at a bottom part of the bottom removal-type paper supply apparatus;
a-force applying means which presses for applying a pressure on the paper stacked on a the paper support base;
a first pickup roller which is provided at an end portion of the paper support base on the a side toward the a body of an the bottom removal-type paper supply apparatus, and which picks a paper sheet from the paper stacked on the paper support base from the bottom and transports it the paper sheet into the bottom removal-type paper supply apparatus; and
a second pickup roller which is provided at a central portion of the paper support base, and which assists selectively assisting the first pickup roller and transports stacked to transport the paper sheet into the bottom removal-type paper supply apparatus; characterized in that and
a shutter which can be switched switchable between an open state in which the stacked paper can come into is in contact with the second pickup roller, and a closed state in which the shutter prevents the contact between the paper and the second pickup roller, the shutter being is provided on the second pickup roller, and wherein
the paper supply apparatus is configured to open the shutter is switched in the open state so as to utilize the to use a paper transport force of the second pickup roller in addition a paper transport force of the first pickup roller only when more than a prescribed weight or a prescribed number of sheets of paper are stacked on the paper support base, and the shutter is switched in the closed state otherwise, to use only the paper transport force of the first pickup roller.

2. (Currently Amended) A bottom removal-type paper supply apparatus as set forth in claim 1, wherein the pressure applied to the paper by the pressure force applying means ~~can be~~ is adjusted adjustable.

3. (Currently Amended) A bottom removal-type paper supply apparatus as set forth in claim 1, wherein ~~opening and closing of the shutter is~~ switched between the open state and the closed state carried out by based on sensing the weight of the paper stacked on the paper support base, and ~~controlling the shutter so as to open the shutter~~ is controlled to be in the open state when the weight of the stacked paper is at least a larger than the prescribed weight, and close the shutter to be in the closed state when the weight of the paper is less than or equal to the prescribed weight.

4. (Currently Amended) A bottom removal-type paper supply apparatus as set forth in claim 1, wherein ~~opening and closing of the shutter is~~ switched between the open state and the closed state carried out by based on sensing a pickup miss by the first pickup roller, and ~~controlling the shutter so as to~~ is controlled to be in the open state the shutter when a pickup miss has occurred because more than the prescribed number of sheets of paper are stacked on the paper support base, and to be in the close closed state the shutter when the sheet of paper has been fed into transported through the apparatus.

5. (New) A paper supplying device supplying one sheet of paper at a time in an image processing apparatus, comprising:

a first pickup roller, located at an end portion of a paper stack, to pick a paper sheet from the paper stack, and to transport the paper sheet into the paper supply apparatus;

a second pickup roller, located at a central portion of the paper stack, and assisting the first pickup roller to transport the sheet of paper into the paper supply apparatus when the second pickup roller is in contact to the paper; and

a shutter switchable between an open state in which the second pickup roller is in contact with the paper, and a closed state in which the shutter prevents the contact between the second pickup roller and the paper, so that only the first pickup roller transports the paper sheet through the paper supply apparatus, wherein

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the shutter is switched in the open state when the paper stack weights more than a prescribed weight or has more than a prescribed number of sheets of paper.